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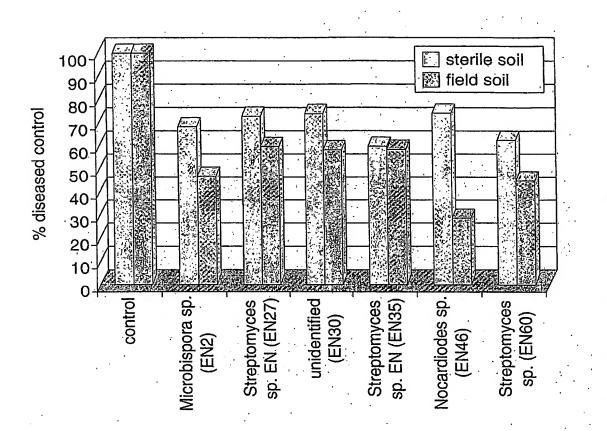
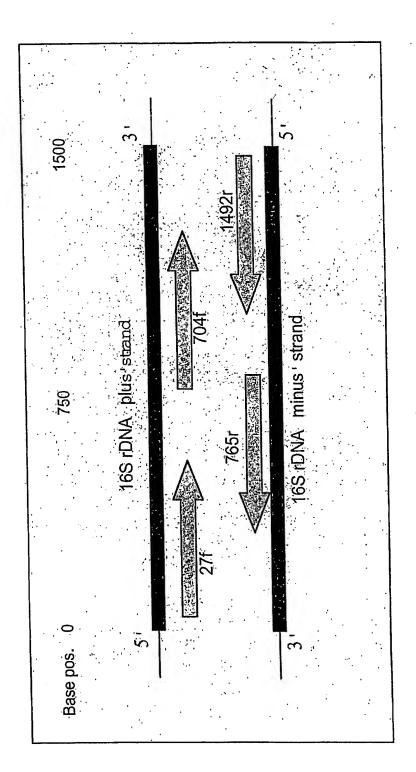


Figure 1





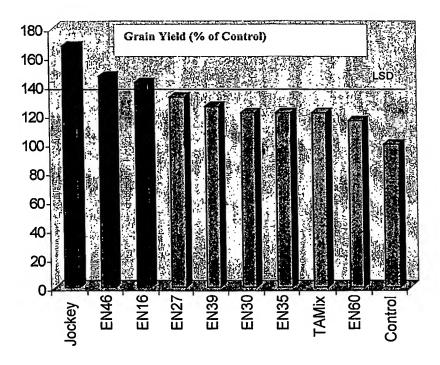
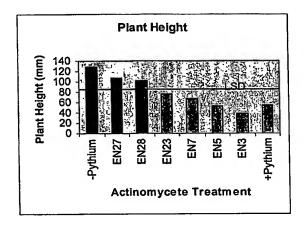


Figure 3



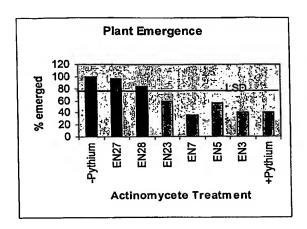


Figure 4

Figure 5

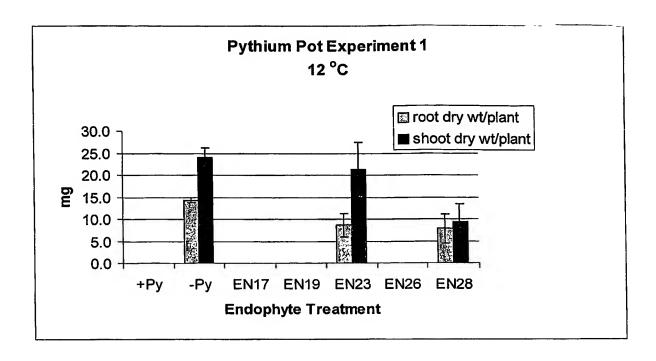


Figure 6

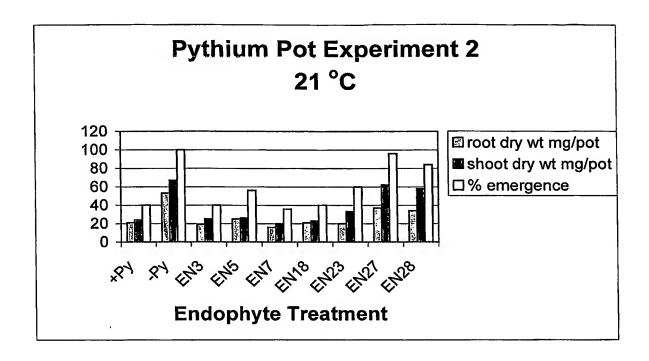
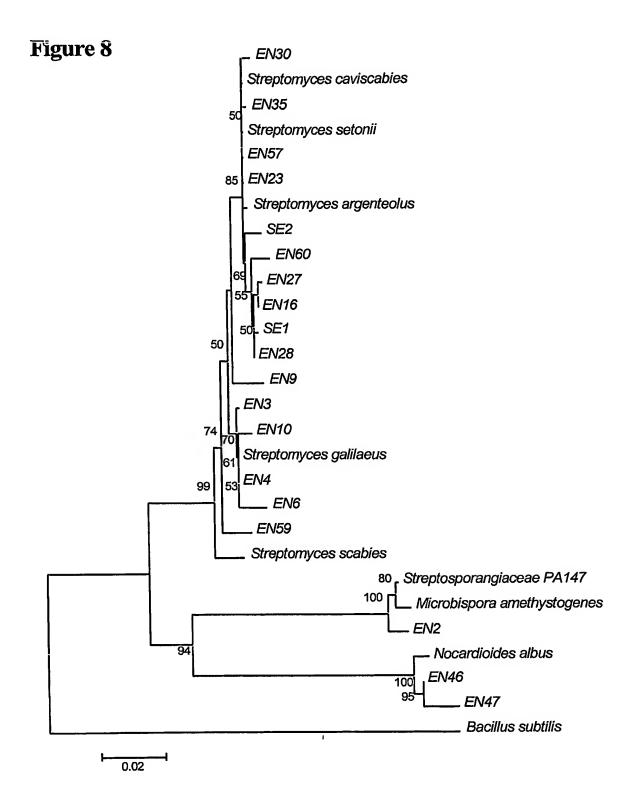


Figure 7



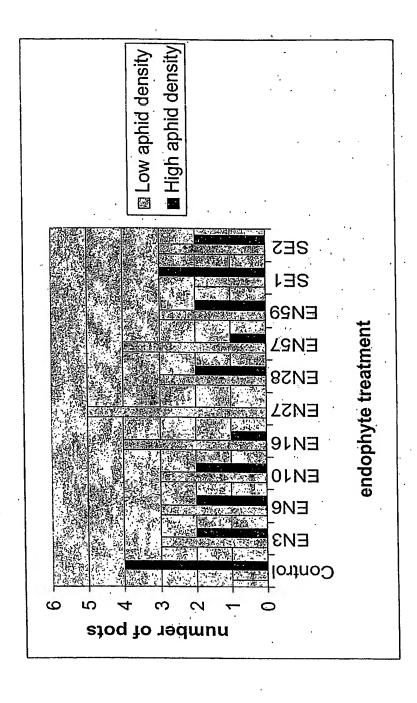


Figure 9

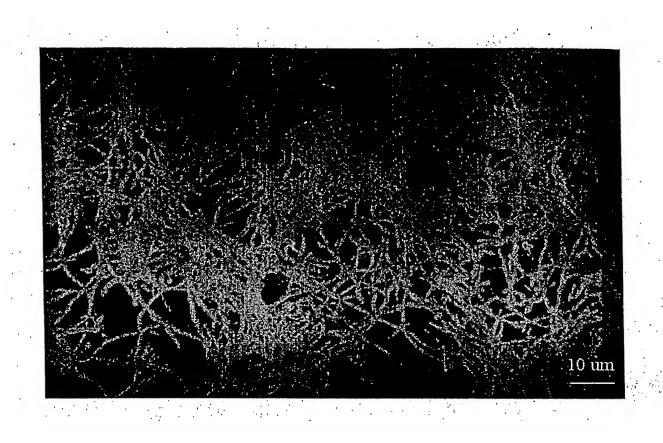
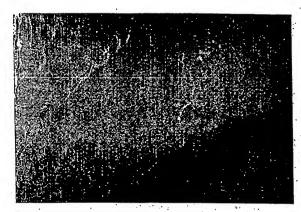


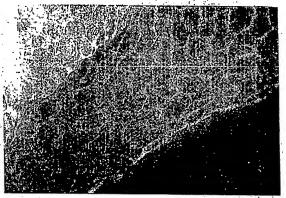
Figure 10

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11.1 Blue excitation/ green emission

11.2 UV excitation/ blue emission





11.3 Image enhanced merge

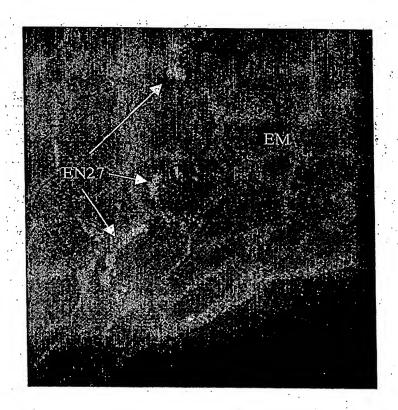
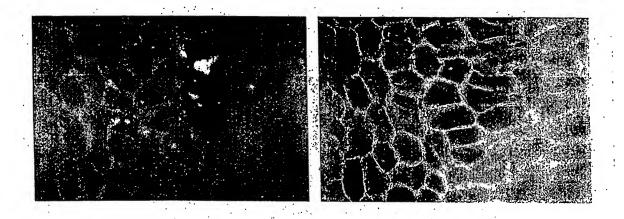


Figure 11

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12.1 Blue excitation/ green emission

12.2 UV excitation/blue emission



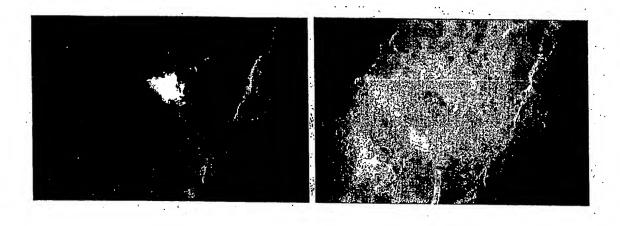
12.3 Image enhanced merge



Figure 12

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13.1 Blue excitation/ green emission 13.2 UV excitation/ blue emission



13.3 Image enhanced merge

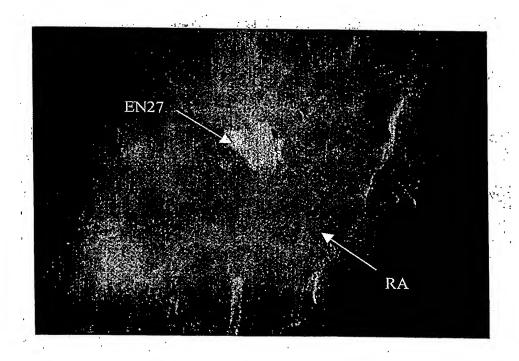
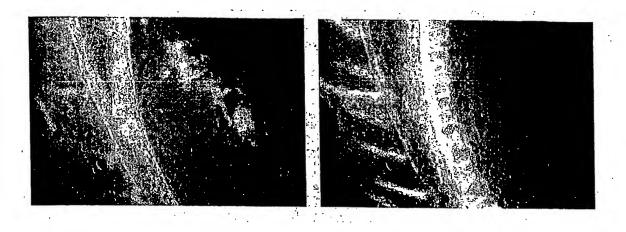


Figure 13

14.1 Blue excitation/ green emission 14.2 UV excitation/ blue emission



14.3 Image enhanced merge

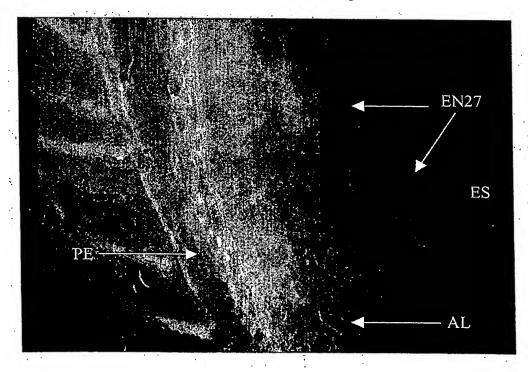


Figure 14

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FIGURE 15

EN2

SEQ ID NO:1

CTTAACACATGCAANTCAAGCGGAAAGGCCCTTCGGGGTACTCAANCGGCNAACGGGTGATTAACACNTGANTAA CCTGCCCTGACTCTGGGATAANCCTGGGAAACTGGGTCTAATACCGGATACAACCATTTCTCNCATGGGATGGT GGTGGAAANTTTTTNCGGTTGGGGATGGGCTCGCGGCCTATCACCTTGTTGGTGGGGTGATGGCCTACCAAGGCg ACGAACGGTagCCCGCCTGAgAGGGCGACCGGCCaCaCTGGGACTGAgACaCCGCCCGAACTCCTaCgGGAGGCA $\tt gCACTgGGGGAATaTTGCCCATGGGCGGAAGCCTGACGCAGNGACGCCGCGTGGGGGGATGACGGCCTTNGGGTTGT$ AAACCTNTTTCAGCAGGGACGAAGTTGACGTGTACCTGTAGAAGAAGCGCCGGCTAAATANGTGCCAGCAGCCGC GGTAATANGTAGGGCGCGAGCGTTNTCCGGAATTATTGGGCGTAAAGAGTTTGTAGGTGGCTTGTTGCCTTTGCC GTGAAAGCCCGTGGCTTAANTACGGGTTTGCGGTGGATACGGGCAGGCTAGAGGCTGGTAGGGGCAAGCGGAATT $\verb|CCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAGACACCGGTGGCGAAGGCGGCTTGCTGGGCCAgTTCtga| \\$ CGGTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAACGTTGGGCGCTA GGTGTGGGGGTCTTCCACGATCTCTGTGCCGTAGCTAACGCATTAAGCGCCCCGCCTGGGGAGTACGGCCGCAAG GCTAAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCGGGGGGGCATGTTGCTTAATTCGACGCAACGCGAAGA ACCTTACCAAGGTTTGACATACACCGGAAACACTCANANATGGGTGCCTCCTTTGGACTGGTGTACAGGTGGTGC ATGGCTGTCNNCACCCTCGTGTCGTNAGATGTNGGGTTAAGTCCCGCAACGANCGCAACCCTTGGTTCCATGTTG CCAGCACNCCCTTTGNGGTGGTGGGGACNCATGGGGANAATGCCGGGGTCNACTCNGGAGGAAGGTGGGGATGACG TCAAGTNATCNTGCCCCTTATGTTCTTGNNGTG

EN3

SEQ ID NO:2

GCTGGCGGCGTGCTTAACACATGCAAGTCGAACGATGAACCACTTCGGTGGGGATTAGTGGCGAACGGGTGAGTA ACACGTGGGCAATCTGCCCTTCACTCTGGGACAAGCCCTGGAAACGGGGTCTAATACCGGATAACACTNCTGCTC TCATGGGCAGGGTTAAAAGCTCCGGCGGTGAAGGATGAGCCCGCGGCCTATCAGCTTGTTGGTGAGGTAATGGC TCACCAAGGCGACGGCTAGCCGGCCTGAGAGGGCGACCGGCCACACTGGGACTGAGACACGGCCCAGACTCC TACGGGAGGCAGCAGTGGGGAATATTGCaaCAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGAGGGATGACG GCCTTCGGGTTGTAAACCTCTTTCAGCAGGGAAGAAGCGAAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAAC TACGTGCCAGCAGCCGCGTAATACGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTtGTAGGC GGCTTGTCACGTCGGGTGTGAAAGCCCGGGGCTTAACCCcGGGTCTGCATTCGATACGGGCTAqCTAqAGTGTGG TAGGGGAGATCGGAATTCcTGGTGTAGCGGTGAAATGCgCAGATATCAGGAGGAACACCGGTGGCGAAGGCGGaT cTcTGGGCCATTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCC GTAAACGGTGGGAACTAGGTGTTGGCGACATTCCACGTCGTCGGTGCCGCAGCTAACGCATTAAGTTCCCCGCCT GGGGAGTACGGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCAGCGGAGCATGTGGCTTAA TTCGACGCAACGCGAAGAACCTTACCAAGGCTTGACATACACCGGAAAGCATCAGAGATGGTGCCCCCCTTGTGG Ttcggtgtacaggtggtgcatggctgtcgtcagctcgtgtcgtgagatgttgggttaagtcccgcaacgagcgca ACCCTTGTTCTGTTGCCCAGCATGCCCTTCGGGGTGATGGGGACTCACAGGAGACCGCCGGGGTCAACTCGGAG GAAGGTGGGGACGTCAAGTCATCATGCCCCTTATGTCTTGGGCTGCACACGTGCTACAATGGcCGGTACAAA GAGCTGCGATACCGTGAGGTGGAGCGAATCTCAAAAAGCCGGTCTCAGTTCGGATTGGGGTcTGCAACTCGAcCC CATGAAGTCGGAGTTGcTAATAATCgCANATCAgCATTGCTGCGGTGAATACGTTcCCGGGCCTTGTACAcACCG CCcGTCACGTcACGAAAGTCGgTAAcACCcGAAgCCGGTGGCCAACCCCTTgTGGGAGGqAGCTGTCGAAGGTGG GACTGGCGATTG

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[FIGURE 15 CONTINUED]

EN16

SEQ ID NO:7

GCTTNTTGGTGGGNCNATGGCCTACCAAGGNGAGGACGGNTANCCNGCCTGNGAGGGAGACCGNCCACACTGGGA
ATGNGANACGGCCCAGAATCCTACGGGAGGCAGCANNGGGGAANATTGCACAANGGGCGAAAGCCTGATGCAGNG
ANGCCGCGTGAGGGAAGACGGCCTTTGGGTTGTAAACCTNTTTNAGCAGGGAAGAAGCGAAAGTGACGGTACCTG
CAGAAGAAGCGCCGGCTAANTANGTGCCAGCAGCCGCGGTAATANGTAGGGCGCAAGCGTTGTCCGGAATTATTG
GGCGTAAAGAGCTTGTAGGCGGCTTGTCANGTNGGATGTGAAAGCCCGGGGCTTAACCCCGGGTTTGCATTTGAT
ACGGGCTAGCTAGAGTGTGGTAGGGGAGATNGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAA
CACCGGTGGCGAAGGCGGATCTCTGGGGCCATTACTGACGCTGAGGAGCGAAAAGCGTGGGGAGCGAACAGGATTAG
ATACCCTGGTAGTCCACGCCGTAAACGTTGGGAACTAGGTGTTGGCGACATTCCACGTCGTCGTCGCCGCAGCTA
ACGCATTAAGTTCCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCCGCACAAG
CAGCGGAGCATGTGGCTTAATTCGACGCAACGCGAAGAACCTTACCAAGGCTTGACATATACCGGAAAGCATCAG
AGATGGTGCCCCCCTTGTGGTCGGTATACAGGTGGTCATGCCTTTCCGGGGTGATGTTGGGTT
AAGTCCCGCAACGACGCAACCCTTGTTCTGTGTTGCCAGCATGCCCTTCGGGGTGATGGGGACTCACAGGAGAC
TGGGGGTCTGNAACTCGACCCCATGAANTCGGAGTTGCTAATAATCCCAAATTCANCATTGGTGCGGTGAATACT
TCCCGGGCCTGGTACACNACCGCCCGTCAACTCACGAAAGTCGGTNAAACCCGAAACCGGTGGGCCAACCCCTTG
TGGGAAGGAACTGGCCTAAACTGGCGATTGGGAC

EN23

SEQ ID NO:10

ACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGATGAAGCCGCTTCGGTGGTGGATTAGTGGCGAACG GGTGAGTAACACGTGGGCAATCTGCCCTTCACTCTGGGACAAGCCCTGGAAACGGGGTCTAATACCGGATAACAC TCTGTCCCGCATGGGACGGGTTGAAAGCTCCGGCGGTGAAGGATGAGCCCGCGCCTATCAGCTTGTTGGTGGG GTAATGGCCTACCAAGGCGACGGCTAGCCGGCCTGAGAGGGCGACCGGCCACACTGGGACTGAGACACGGCC CAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGAGG GATGACGGCCTTCGGGTTGTAAACCTCTTTCAGCAGGGAAGAAGCGAAAGTGACGGTACCTGCAGAAGAAGCGCC GGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCT AGTGTGGTAGGGGAGATCGGAATTCCTGGTGTAgCGGTGAAATGCGCAGATATCAGGAGGAACACCGGTGGCGAA GGCGGATCTCTGGGCCATTACTGACgTcTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGgTAG TCCACGCCGTAAACGTTGGGAACTAGgTGTTGGCGACATTCCACGTCGTCGGTGCCGCAGCTAACGCATTAAGTT CCCCGCCTGGGGAGTACGGCCGAAGGCTAAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCAGCGGAGCATG TGGCTTAATTCGACGCAACGCGAAGAACCTTACCAAGGCTTGACATATACCGGAAAGCATCAGAGATGGTGCCCC CCTTGTGGTCGGTATACAGGTGGTGCATGGCTGTCGTCAGCTCGTGAGATGTTGGGTTAAGTCCCGCAAC GAGCGCAACCCTTGTTCTGTGTTGCCAGCATGCCCTTCGGGGTGATGGGGACTCACAGGAGACTGCCGGGGTCAA CTCGGAGGAAGGTGGGGACGACGTCAAGTCATCCCCCTTATGTCTTGGGCTGCACACGTGCTACAATGGCCG GTACAATGAGCTGCGATGCCGCGAGGCGGAGCGAATCTCAAAAAGCCGGTCTCAGTTCGGATTGGGGTCTGCAAC TCGACCCCATGAAGTCGGAGTTGCTAGTAATCGCAGATCAGCATTGCTGCGGTGAATACGTTCCCGGGCCTTGTA AAGGTGGGACTGGCGATTG

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[FIGURE 15 CONTINUED]

EN27

SEQ ID NO:12

TTAANACATGCAANTCGAACGATGAACCCNGTTTCGGTGGTGGATTAGTGGCGAACGGTGAGTAANANGTGGGCA ATTTGCCCTTCATTTTGGACAAGCCCTGGAAACGGGTTTAATACCGGATAACATTTTNTCCCGCATGGGANGGGG TTGAAAGNTCCGGCGGTGAAGGATGAGCCCGCGGCCTATNAGCTTGTTGGTGGGGTAATGGCCTACCCAAGGGAG GTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGANGCCGCGTGAGGGATGACGGCCTTNGGGTTGTAA ACCTTTTTNAGCAGGGAAGAAGCGAAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAAATAAGTGCCAGCAGCC GCGGTAATAAGTAGGCCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTTGTAGGCGGCTTGTCANGTNGG ATGTGAAAGCCCGGGGTTTAACCCCGGGTTTGCATTTGATACGGGCTAGNTAGAGTGTGGTAGGGGAGATNGGAA TTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACACCGGTGGCGAAGGCGGATCTCTGGGCCATTACT GACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGTTGGGAAC TAGGTGTTGGCGACATTCCACGTCGTCGGTGCCGCAGCTAACGCATTAAGTTCCCCGNCTGGGGAGTACGGCCGC AAGGCTAANACTCAAAGGAATTGACGGGGGCCCGNACAAGCAGCGGANCATGTGGCTTAATTCGACGCANCGCGA AGAACCTTACCAAGGCTTGACATATACCGGAAAGCATCAGAGATGGTGCCCCCCTTGTGGTCGNTATACANGTGG TGCATGNCTGTCGTCACCTCGTGTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCNACCCTTGNTCTGTGTT GNCANCATGCCCTTCGGGGNTGATGGGGACTCACAGGANACTGNCCGGGGTCAACTCCGGANGAAGGTGGGTGAC GAAGTCAAGGTCATCATGNCCCCTTATGTCTTGGTGCTGCACACGTGC

EN28

SEQ ID NO:13

TTCGGNGGTGGANTAGNGGCGNACGGGNGACCAACANGNGGGCAATCCCCCCTTCANTTTNGGACAACCCCTGGA
AACGGGTTNTAATACCGGATAACANTTTNTCCCCGCATGGGANGGGGTTGAAAGCTCCGGCGGTGAAGGATGAGC
CCGCGGCCTATCAGCTTGTTGGTGGGGTAATGGCCTACCAAGGCGACGACGGCTAGCCGGCCTGAGAGGGCGACC
GGCCACACTGGGANTGAGANACGGCCCAGAATCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGAAA
GCCTGATGCAGCGACGCCGCGTGAGGGATGACGGCCTTCGGGTTGTAAACCTTTTTCAGCAGGGAAGAAGCGAAA
GTGACGGTACCTGCAGAAGAAGCGCCGGCTAAATANGTGCCAGCAGCCGCGGTAATANGTAGGGCGCAAGCGTTG
TCCGGAATTATTGGGCGTAAAGAGNTTGTAGGCGGCTTGTCANGTCGGATGTGAAAGCCCGGGGCTTAACCCCGG
GTTTGCATTCGATACGGGCTAGCTAGAGTGTGGTAGGGGGAGATCCTGGTGTAGCGGTGAAATGCGCAG
ATATCAGGAGGAACACCGGTGGCGAAGGCGGATCTCTGGGCCATTACCTGGTGTGGGGAAAGCGTGGGGAG
CGAACAGGAATTAGATACCCTGGTAGTCCACGCCGTAAACGTTGGGAACTAGGTGTTGGCGACATTCCACGTCGT
CGGTGCCGCAGCTAACGCATTAAGTTCCCCGCCTGGGGAGTACGCCGCAAGGCTAAAACTCAAAGGAATTGAC
GGGGGCCCGCACAAGCAGCGGAGCATTGACATAT

[FIGURE 15 CONTINUED]

EN46

SEQ ID NO:16

ATGCAAGTCGAGCGGAAAGGCCCTTCGGGGTACTCGAGCGGCGAACGGGTGAGTAACACGTGAGTTAATCTGCCC CAGGCTCTGGATACCCACCGGAAAACGGTGATTAATACCGAATACGACAACCGATTTGCATGATCTGGTGGTGNA AAGTTTTTCGGCCTGGGATGTGCTTCGCGGCCTATCAGCTTGTTGGTGAGGTAATGGCTCACCCAAGGCTTCGAC GGTAGCCGGCCTGAGAGGGTGACCGNCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTG GGGAATATTGGACAATGGGCGGAAGCCTGATCCAGCAACGCCGCGTGAGGGATGACGGCCTTCGGGTTGTAAACC TCTTTCAGCACAGACGAAGCGCAAGTGACGGTATGTGCAGAAGAAGGACCGGCCAACTACGTGCCAGCAGCCGCG GTAATACGTAGGGTCCGAGCGTTGTCCGGAATTATTGGGCGTAAAGGGCTCGTAGGCGGTCTGTCGCGTCGGGAG TGAAAACCAGGTGCTTAACACCTGGCCTGCTTTCGATACGGGCAGNCTAGAGGTACNCAGGGGAGAATGGAATTC $\tt CTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAAACACCGGTGGCGAAGNCGGTTCTCTGGGAGTATCCTGA$ ${\tt CGCTGAGGAGCGAAAGTGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACACCGTAAACGTTGGGCGCTA}$ GGTGTGGGACACATTCCACGTGTTCCGTGCCGCAGCTAACGCATTAANCGCCCCGCCTGGGGAGTACGGCCGCAA NGCTAAAACTCANAGGAATTGACGGGGGCCCGCACAAGCGGGGAGCATGCGGATTAATTCGATGCAACGCGAAG TGGCTGTCgtCAgCtCgCTGTCGTGAGATGTtCGGGTTAAGTCCCGCAACGAGCGCAaCCCTCgTCCTATGTTGC ${\tt CagCAATTCGGTTGgGGACTCATAGGAgACTGCCgGGGGTCaACTCGGAGGAAGGTGGGGGATGACGTCAAGTCATC}$ ATGCCCCTTATGTCCAGGGCTTCACGCATGCTACAATGGCCGGTACAAAGGGCTGCGATCCCGTGAGGGTGAGCG AATCCCAAAAAGCCGGTCTCAGTTCGGATTGGGGTCTGCAACTCGACCCCATGAAGTCGGAGTCGCTAGTAATCG CAGATCAGCAACGCTGCGGTGAATACGTTCCCGGGCCTTGTACACCCCCCCGTCACGTCACGAAAGTCGGCAAC ACCCGAAGCCANTGGCCCAACTCGTAAGAGAGGGAGCTGT

EN60

SEQ ID NO:18

ATGCAAGTNGAACGATGAANCCNTTTGGGGTGGATTAGTGGCGAACGGGTGAGTAANANGTGGGCAATTTGCCCT TCAATTTGGGACAAGCCCTGGAAACGGGGTNTAATACCGGATAACANTNTGTCCCGCATGGGACGGGGTTAAAAG CTCCGGCGGTGAAGGATGAGCCCGCGGCCTATNAGCTTGTTGGTGGGGTGATGGCCTACCAAGGCGACGACGGGT AGCCGGCCTGAGAGGGCGACCGGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGG AATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGAGGGATGACGCCTTCGGGTTGTAAACCTTT TTCAGCAGGGAAGAGCGAAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAAATANGTGCCAGCAGCCGCGGTA ATANGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGTTTGTAGGCGGCTTGTCACGTNGGATGTGA GTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACACCGGTGGCGAAGGCGGaTcTcTGGGCCATTACTGACGNT GAGGAGCGAAAGCGTGGGGAGCNAACAGNATTAGATACCCTGGTAGTCCAAGCCGTAAACGTTGGGAACTANGTG TTGGCGACATTCCACGTCGTCNNTGCCGCANCTAACGCATTAAGTTCCCCGCCTGGGGAGTACGGCCGCAAGGCT AANACTCAAAGGAATTGANGNNGGCCCGCACAAGCAGCGGAGCATGTGGCTTANTTCNACGCANCGCGAAGAACC TTACCAAGGTTTGCCATATAcCGGAAAgCaTCAgAgATgGTGCCCCCCTtGTGGTCGGTATACAGqTGGTGCNTG GCTGTCGTCAgCTCGTGTCGTGACAtGTtGGTTAAgTCCCGTCAaCGAGqCGCAACCCTTGTTNTGTGTNGCCAG CATGCCCTTCGGGGTGATGGGGACTCACAGGAGACTGCCGGGGTCAACTCGGAGGAAGGTGGGGACGACGTCAAG TCATCATGCCCCTTATGTCTTGGGCTGCACACGTGCTACAATGGCCGGTACAATGAGCTGCGATGCCGCGAGGCG GAGCGAATCTCAAAAAGCCGGTNTCAGTTCGGATTGGGGTCTGCAACTCGACCCCATGAAGTCGGAGTTGCTAGT AATCGCAGATCAGCATTGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACGTCACGAAAGTCG GTAACACCCGAAGCCGNTGG

[FIGURE 15 CONTINUED]

PM87

SEQ ID NO:24

GGCCCAGANATCCGNCTTCGCCACCGGTGTTCCTCCTGAATATCTGCGCATTTCACCGCTACACCAGGAATTCCG
ATCTCCCCTACCACACTCTAACTAGCCCGTATCGAATGCAGACCCGGGGTTAAGCCCCGGGCTTTCACATCCGAC
GTGACAAGCCGCCTACGAGCTCTTTACGCCCAATAATTCCGGACAACGCTTGCGCCCTACGTATTACCGCGGCTG
CTGGCACGTAATTAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTCGCTTCTTCCCTGCTGAAAGAGGGTTTACA
ACCCGAAGGCCGTCATCCCTCACGCGGCGTCGCTGCATCAGGCTTTCGCCCATTGTGCAATATTCCCCACTGCTG
NCTCCCGTANGAGTCTGGGCCGTGTCTCAGTCCCAGTGTGGCCGGTCGNCCTCTCAGGCCGGCTACCGTCGC
CTTGGTAGGCCATTACCCCACCAACAAGCTGATANGCCGNGGGCTCATCCTTCANCGTCGGAGCTTTCAANCCCG
TCCATGCGGGACAGAGTGTTATCCGGTATTANACCCCGTNTCAGGGCTTGTCCANAGTGAAGGGCAGATNGCCAC
GTGTTATCACCGTTCGCCACTAATNACANCGAAACGGCTTATCGTNCGACTGCATGTGTTAACACNCGCAGCGTT
CGTCCTGAGCCAG

FIGURE 16

EN5

SEQ ID NO:3

GTAATGCCCANAAAACCGCCTTCGCCACCGGTGTTCCTCCTGATATCTGCGCATTTCACCGCTACACCAGGAAT TCCNATCTCCCCTACCACACTCTAGCTAGCCCGTATCNAATGCAAACTCGGGGTTAAGCCCCNAGCTTTCACATC CGACGTGACAAGCCGCCTACAANCTCTTTACGCCCAATAATTCCGGANAACGCTCGCACCCTACNTNTTACCGCG GCTGCTGGCNCGTNTTTAGCCGGTGCTTCTTCTGCAGGTACCGTCACTTTCGCTTCTTCCCTGCTNAAAAAAGGTT TACAACCCTANGGCCGT

EN6

SEQ ID NO:4

EN7

SEQ ID NO:5

CCGCCTTCGCCACCGGGTGTTCCTCCTGATATCTGCGCATTTCACCGCTACACCAGGAAATTCCNATCTCCCCTA
CCACACTCTANCTANCCCGTATCGAATGCAAACCCGGGGTTAANCCCCGGGCTTTCACACCCGACNTGACAAGCC
GCCTACAAACTCTTTACGCCCAATAATTCCGGACAACGCTTGCGCCCTACNTATTACCGCGGCTGCTGGCACNTA
TTTAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTCGCTTCTTCCCTGCTGAAAAAGGTTTACAACCCGAAGGC
CGTCATCCCTCACGCGGCGTCGCTCACTCAGGCTTTCGCCCATTGTGCAATATTCCCCACTGCTGCCTCCCNTAG
GAATCTGGGCCGTGTCTCAATCCAGTGTGGCCGGTCCCCTCTCNGGCCGGCTACCGTCNTCCCTTGGTNACCATT
ANCTCACCAACAACTGATAGGNCGCGGGCTCATCTTCACGCGGGAACTTTCAACCACC

EN9

SEQ ID NO:6

[FIGURE 16 CONTINUED]

EN17

SEQ ID NO:8

CCGCCTTCGCCACCGGTGTTCCTCCTGATATCTGCGCATTTCACCGCTACACCAGGAATTCC
NATCTCCCTACCACACTCTAGCTAGCCCGTATCAAATGCAAACCCGGGGTTAAGCCCCGGGCTTTC
ACATCCNACGTGACAAGCCGCCTACAANCTCTTTACGCCCAATAATTCCGGACAACGCTTGCGCCCT
ACNTATTACCGCGGCTGCTGGCACNTATTTAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTCGCT
NCTTCCCTGCTGAAANAGGTTTACAACCCAAAGGCCNTCATCCCTCNCCGGCNTCNTTGCNTCNGGC
TTNCNCCCATTGTTCAANNTTCCCCACTGCTNCCTCCCCTCGGAATCTGGGCCGNTGTCTCATTCCCN
TTNTGGCCGGTCCCCCTCNCAGGCCNGCTACCC

EN19

SEQ ID NO:9

CTCAGCGTCNGTAATGGCCCAAAAACCGCCTTCGCCACCGGTGTTCCTCCTGATATCTGCGCATTTCACCGCTAC
ACCAGGAATTCCNATCTCCCCTACCACACTCTAGCTAGCCCGTATCNAATGCAAACCCGGGGTTAANCCCCGGGC
TTTCACATCCNACNTGACAAGCCGCCTACAANCTCTTTACGCCCAATAATTCCGGACAACGCTTGCNCCCTACTT
ATTACCGCGGCTGCTGGCACTTATTTAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTCGCTTCTTCCCTGCTN
AAAAAGGTTTACAACCCNAAGGCCGTCATCCCTCACGCGGCNTCGCTGCATCAGGCTTTCNCCCATTGTGCAATA
TTCCCCACTGCTGCCTCCCGTAGGATTCTGGGCCGTNTCTCATTCCCANTGTGGCCGGTCGCCCTCTCAGGCCGG
CTACCCGTCNTCNCCTTGGTAGGCCATTACCCCACCAACAAGCTNATAGGCCGCGGGGCTCATCCTTCACCGCCGG
AAGCTTTCAACCCCNTCCATGCGGGANAAATTGTTNTCCGGTATTAAACCCCGTTTCCAGGGNTTGTCCCAAAAT
TGAAGGGGGGGATTGNCCACTTTTTACTCACCCGTTCNCCNCTAATCCACCACC

EN26

SEQ ID NO:11

CCGCCTTCGCCACCGGTGTTCCTCCTGATATCTGCGCATTTCACCGCTACACCAGGAATTCCNATCTCCCCTACC
GAACTCTANCCTGCCCGTATCNACTGCAAACCCGGGGTTAAGCCCCGGGCTTTCACAACCGACNTGACAAGCCGC
CTACAANCTCTTTACNCCCAATAATTCCGGACAACGCTTGCGCCCTACNTATTACCGCGGCTGCTGGCACNTATT
TAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTCGCTTCTTCCCTGCTGAAAAAGGTTTACAACCCGAAGGCCG
TCNTCCCTCACGCGGCGTCGCTGCATCAGGCTTTCGCCCATTGTGCAATATTCCCCACTGCTGCCTCCCGTAGGA
TTCTGGGCCGTGTCTCANTCCCANTNTGGCCGGTCCCCTCTCAGGCCGGNTACCCGTCGTCCCTTGGTGAACCNC
TACCTCNCCAACAANCTGATAGGGCGCGGGCTCANCNTGCACGCCGGANCTTT

EN35

SEQ ID NO:14

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[FIGURE 16 CONTINUED]

GGTGGTGCATGGCTGTCANCTCGTGTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTGTTCT
GTGTTGCCAGCATGCCCTTCGGGGTGATGGGGACTCACAGGAGACTGCCGGGGGTCAACTCGGAGGAAGGTGGGGA
CGACGTCAAGTCATCATGCCCCTTATGTCTTGGGCTGCACACGTGCTACAATGGCCGCTACAATGACCTGCGATG
CCGCGAGGCGGACCGAATCTCAAACAAGCCCGTCTCATTCGGATTGCGGTCTGCAACtcCGACCCCATGAAGTCC
GACTtGCTAGTACTCGCACGTCAACATtGCTGCGCTGAATACGTCCCCGGGCCTTGTACACACCCCCGTCACGT
CACGAAAGTCGGTAACACCCCGAAGCCGGTGGNCCAACCCCTTGTGGGAGGGAGCTGTCGAA

EN39

SEQ ID NO:15

ccgccttcgccaccggtgttcctcctgatatctgcgcatttcaccgctacaccaggaattccnatctcccctacc acactctagctancccgtatcnaatgcaaacccggggttaacccccgggctttcacacccnacntnacaanccgc ctacaaactctttacgcccaataattccggacaacgcttgcgccctacttattaccgcggctgctggcacttatt tagccggcgcttcttctgcaggtaccgtcactttcgcttcttccctgctgaaaaaggtttacaacccgaaggcng tcatccctcacgcggcntcgctgcatcaggctttcgcccattgtgcaatattccccactgctgctcccgtagna ntctgggccgtntctcantcccagtgtggncggtcgccctctcaggccggctacccgtcgtcncctnggtnaacc attanntcaccaacaagctgataggccgcgggctcatccttcaccgccggagcttttaacccctgcccatgaaaa cagangtnttatccggtattanaacccgtttccaggg

EN57

SEQ ID NO:17

GTGCTTAACACATGCAAGTCGAACGATGAAGCCGCTTCGGTGGTGGATTAGTGGCGAACGGGTGAGTAACACGTG GGCAATCTGCCCTTCACTCTGGGACAAGCCCTGGAAACGGGGTCTAATACCGGATAACACTCTGTCCCGCATGGG ACGGGGTTGAAAGCTCCGGCGGTGAAGGATGAGCCCGCGGCCTATCAGCTTGTTGGTGGGTAATGGCCTACCAAG GCGACGACGGGTAGCCGGCCTGAGAGGGCGACCGGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAG GCAGCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGAGGGATGACGGCCTTCGGG TTGTAAACCTCTTTCAGCAGGGAAGAAGCGAAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAACTACGTGCCA GCAGCCGCGTAATACGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTCGTAGGCGGCTTGTCA ${\tt TCGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATNCAGGAGGAACACCGGTGGCGAAGGCGGATCTCTGGCC}.$ ATTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGTT ${\tt GGGAACTAGGTGTTGGCGACATTCCACGTCGTCGGTGCCGCAGCTGAACGCATTAAGTTCCCCGCCTGGGGAGTA: }$ CGGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCAGCGGAGCATGTGGCTTAATTCGACGC AACGCGAAGAACCTTACCAAGGCTTGACATATACCGGAAAGCATCAGAGATGGTGCCCCCCTTGTGGTCGGTATA CAGGTGGTGCATGGCTCGTCAGCTCGTGTGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTGTT $\tt CTGTGTTGCCAGCATGCCCTTCGGGGTGATGGGGACTCACAGGAGACTGcCGGGGTCAACTCGGAGGAAGGTGGG$ GACGACGTCAAGTCATCATGCCCCTTATGTCTTGGGCTGCACACGTGCTACAATGGCCGGTACAATGAGCTGCGA TGCCgCGAgGCGAgCgAATCTCAAAAAGCCGGTCTCAqTTCGGATTGGGGTCTGCAACtCGACCCCATGAAGTC GGAqTTGCTAgTAATCgCAgATCAgCATTGCTGcGGTGAATACGTTCCCGGGCCTTGTACACACCGCCGTCAcGT

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FIGURE 17

SE1

SEQ ID NO:19

GAACGATGAAGCCGTTTCGGTGGTGGATTAGTGGCGAACGGTGAGTAAAAGTGGCAATTTNCCCTTCATTTTGGA CAAGCCCTGGAAACGGGTTTAANACCGGATAACATTNTGTCCCGCATGGGACGGGGTTGAAAGNTCCCGGCGGTG AAGGATGAGCCCGCGCCTTGTTGGTGGGGTAATGGCCTACCAAGGCGACGACGGGTAGCCGGCCTGA GAGGGCGACCGGCCACACTGGGANTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACA ATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGAGGGATGACGGCCTTCGGGTTGTAAACCTNTTTCAGCAGGGA AGAAGCGAAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAAATANGTGCCAGCAGCCGCGGTAATANGTAGGGC GCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTTGTAGGCGGCTTGTCANGTCGGATGTGAAAGCCCGGGGC TTAACCCCGGGTTTGCATTCGATACGGGCTAGTTAGAGTGTGGTAGGGGAGATNGGAATTCCTGGTGTAGCGGTG AAATGCGCAGATATCAGGAGGAACACCGGTGGCGAAGGCGGATCTCTGGGCCATTACTGACGCTGAGGAGCGAAA GCGTGGGGAGCNAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGTTGGGAACTAGGTGTTGGCGACATT CCACGTCGTCGGTGCCGCAGCTAACGCATTAAGTTCCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAG GAATTGACGGGGGCCCGCACAAGCAGCGGAGCATGTGGCTTAATTCGACGCAACGCGAACAACCTTACCAAGGCT TGACATATACCGGAAAGCATCANAGATGGTGCCCCCCTTGTGGTCGGTATACANGTGGTGCATGGCTGTCGTCAG CTCGTGTCGTGAGATGTTGGGTTANGTCCCGCAACGAGCGCNACCCTTGTTCTGTGTCGNCNAGCATGCCCTTCG NGGTGATGGGGACTCACANGAGACTGNCGGGGTCCACTCGGAGGAAGGTGGCGACNACGTCANNTCATCATGCCC CCTTATGTCTTGGGNCTGGCCACGTGCNACNATGGCC

SE2

SEQ ID NO:20

GCTGGCGGCGTGCTTAACACATGCAAGTCGAACGATGAAGCCGCTTCGGTGGTGGATTAGTGGCGAACGGGTGAG TAACACGTGGGCAATCTGCCCTTCACTCTGGGACAAGCCCTGGAAACGGGGTCTAATACCGGATAACACTCTGTC CCGCATGGGACGGGGTTGAAAGCTCCGGCGGTGAAGGATGAGCCCGCGGCCTATCAGCTTGTTGGTGGGGTAATG GCCTACCAAGGCGACGACGGCTAGCCGGCCTGAGAGGGCGACCGGCCACACTGGGACTGAGACACGGCCCAGACT CCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGAGGGATGAC GGCCTTCGGGTTGTAAACCTCTTTCAGCAGGGAAGAAGCGAAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAA $\tt CTACGTGCCAGCAGCCGGTAATACGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTCGTAGG$ TCTCTGGGcCAtTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCAAGC CGTAAACGTTGGGAACTANGTGTTGGCGACATTCCACGTCGTCGGTGCCGCAGCTAACGCATTAAGTTCCCCGTC $\tt CTGGGGAGTACGGCCGCNAGGCTAAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCAGCGGAGCATGTGGCTT$ ANTTCGACGCNACGCGAAGAACCTTNCCAAGGCTGACATATACCGGAAAGCATCAcAGATGGTGCCCCCCTTGTG ${\tt GTCGGTATACAGGgTGGTGCATGGCTGTtCgtCaGCTCGTGTCgtGAGATGTTGGGTTAaGTCCCGCAAAGAGCG}$ CAACCGTGTTCTGTGTTGCCAGCATGCCCTTCGGGGTGATGGGGACTCAcAcGAGACTGTCNGGGTCAACTCgga GGAAgGTGGGGACGACGTCAAGTtCATCATGCCCCTTATGTCTTGGGCTGCACACGNGCTACAATGGCCGGTACA ATGAGNNGGGATGCCGCGAGGCGAATCTCAAAAAGCCGGTCTCAGTTCGGATTGGGGTCTGCAACTGACC CCATGAAGTCGGAGTTGCTAGTAATCGCAGATCAGCATTGCTGCGGTGAATACGTNCCCGGGCCTNGTACACACC ACCCGTCACGTCACGAAAGTCGGTAACACCCTAAGCCGGTGNCCCAACCCCTTNTGGGAGG

FIGURE 18

PM36

SEQ ID NO:21

CCAGANATCCGCCTTCGCCACCGGTGTTCCTCCTGATATCTGCGCATTTCACCGCTACACCAGGAATTCCGATCT
CCCCTACCACACTCTAGCTAGCCCGTATCGAATGCAGACCCGGGGTTAAGCCCCGGGCTTTCACATCCGACGTGA
CAAGCCGCCTACGAGCTCTTTACGCCCAATAATTCCGGACAACGCTTGCGCCCTACGTATTACCGCGGCTGCTGG
CACGTAGTTAGCCGGCGCTTCTTCTCCAGGTACCGTCACTTTCGCTTCTTCCCTGCTGAAAGAGGTTTACAACCC
GAAGGNCGTCATCCCTCACGCGGCGTCGCTGCATCAGGCTTTCGCCCATTGTGCAATATTCCCCACTGCTGCCTC
CCGTAGGAGTCTGGGNCGTGTTCAATNCCAGTGGTGGGCCGGTCGCCCTCTCAGGNCGGCTACCGTCGCCTT
GGTAGGCATTACCACAACAAGCTGATAGGCGGGGGTCATCCTTCAACGCCGGAGCTTCAAACCCGTCCATGCGGG
ACAAGTGTATCCGGTATTAAACCC

PM40

SEQ ID NO:22

TCAGTNATGGCCCAGAANGATCCGNCTTCGCCACCGGTGTTCCTCCTGATATCTGCGCATTTCACCGCTACACCA
GGAATTCCGATCTCCCCTACCACACTCTAACTAGCCCGTATCGAATGCAGACCCGGGGTTAAGCCCCGGGCTTTC
ACATCCGACGTGACAAGCCGCCTACGAGCTCTTNACGCCCAATAATTCCGGACAACGCTTGCGCCCTACGTATTA
CCGCGGCTGCTGGCACGTAGTTAGCCGGCGCTTCTTCTGCAGGTACCGTNACTTTCGCTTCTTCTCCTGCTGAAAG
AGGTTTACAACCCGAAGGCCGTCNTCCCTCACGCGGCGTCGCATCAGGCTTTCGCCCATNGTGCANTATTCC
CCACTGNTGNCTCCCGTANGAGTCTGGGCCGTGTCTCAGTCCCAGTGTGGCCGGTCGNCCTCTCAGGCCGGCTAC
CGTCGTCGCCTTGGTAGGNCATTACCCACCAACAAGCTGATANGTCGNGGGCTCATCCTTCACCGNCGGAGNTTT
AACCCCGTNCATGCGGGACAGAGTGTTATCCGGTATTANACCCGTATNCAGGGCTTGTCCCATAGTGAAGGGNAG
ATNGCCACGTGTTATCACCGTTCGNCACTAATNATCANCGAANCGGCTTCATCGTTCGACTTGCATGTGTTA

PM41

SEQ ID NO:23

PM171

SEQ ID NO:25

[FIGURE 18 CONTINUED]

PM185

SEQ ID NO:26

TCAGTAATGGCCCAGAGATCCGCCTTCGCCACCGGTGTTCCTCCTGGATATCTGCGCATTTCACCGCTACACCAG
GAATTCCGATCTCCCCTACCACACTCTAGCTAGCCCGTATCGAATGCAGACCCGGGGTTAAGCCCCGGGCTTTCA
CATCCGACGTGACAAGCCGCCTACGAGCTCTTTACGCCCAATAATTCCGGACAACGCTTGCGCCCTACGTATTAC
CGCGGCTGCTGGCACGTAGTTAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTCGCTTCTTCCCTGCTGAAAGA
GGTTTACAACCCGAAGGCCGTCATCCCTCACGCGGCGTCGCTGCATCAGGCTTTCGCCCATTGTGCAATATTCCC
CACTGCTGCCTCCCGTAGGAGTCTGGGCCGTGTCTCAGTCCAGTGTGGCCGGTCGCCTCTCAGGCCGGCTACC
CGTCGTCGCCTTGGTAGGCCATTACCCCACCAACAAGCTGATAGGCCGCGGGCTCATCCTTCACCGNCGGAGCTT
TAACCCCGTCCCATGCGGGACAGAGTGTTATCCGGTATTAGAACCCGTTTCCAGGGCTTTGCCAGAGTGAAGGG
CAGATTGCCACGTGTTACTCANCCGTTCGNCACTAATCANCAACGAAGCGGCTTCATCGTTCGACTTGCATGTGT
TAAGCACGCCGNCAGCGTTCGTCCTGAGCCAGGATC

PM208

SEQ ID NO:27

TCAGTATCNGCCCAGAGATCCGCCTTCGCCACCGGTGTTTCCTCCTGATATCTGCGCATTTCACCGCTACACCAG
GAATTCCGATCTCCCCTACCGAACTCTAGCCTGCCCGTATCGACTGCAGACCCGGGGTTAAGCCCCGGGCTTTCA
CAACCGACGTGACAAGCCGCCTACGAGCTCTTTACGCCCAATAATTCCGGACAACGCTTGCGCCCTACGTATTAC
CGCGGCTGCTGGCACGTTAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTCGCTTCTTCCCTGCTGAAAGA
GGTTTACAAACCGAAGGCCGTCATCCCTCACGCGGCGTCGCTGCATCAGGCTTTCGCCCATTGTGCAATATTCCC
CACTGGTGNCTCCCGTANGAGTCTGGGGCGGTGTCTCANTCCAGTGTGGGCGGTCGCTCTCAGGGCGGCTACCGT
CGTCGCTTGGTGAGNCACTACTCACAACAAGCTGATAGGCGCGGGCTCATCTGGAACGGCGGAGCTTTACAC

PM228

SEQ ID NO:28

PM252

SEQ ID NO:29

TCCTCAGNATCAGTAATGGCCCAGAGATCCGCCTTCGCCACCGGTGTTCCTCTGATATCTGCGCATTTCACCGC
TACACCAGGAATTCCGATCTCCCCTACCACACTCTANCTAGCCCGTATCGAATGCAGACCCGGGGTTAAGCCCCG
GGCTTTCACATCCGANGTGACAAGCCGCCTACGAGCTCTTTACGCCCAATAATTCCGGACAANGCTTGCGCCCTA
CGTATTACCGCGGNTGCTGGCACGTAGTTAGCCGGCGCTCTTCTTCTGCAGGTACCGTCACTTTCGCTTCTTCCCTG
CTGAAAGAGGTTTACAACCCGAAGGCCGTCATCCCTCACNCGGCGTCGCTCGCATCAGGCTTTCGCCCATTGTGCA
ATATTCCCCACTGCTGCCTCCCGTAGGAGTCTGGGCCGTGTCTCAATCCCANTGTGGCCGGTCGCCCTCTCANGC
CGGCTACCGTCGTCGCTTGGTAGGCCATTACCCCACCAACAAGCTGGATAGGNCGGGGGCTCATTCTTCACCGCC
GGAAGCTTTAANCCCGTCCATGCGGGANANAGTGNATCCCNGTATTAAACCCNGTTTCAGGGCTTGTCCANAGTG
AAGGGNGATTGCCCNAGTGTTTATCNCCCGTTCGCCANTAATCNACAACGAAAGCGGNTTCNTCGNTTCGACTTG

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[FIGURE 18 CONTINUED]

PM342

SEQ ID NO:30

TAATGGCCCAGAANATCCGCCTTCGCCACCGGTGTTCCTCCTGAATATCTGCGCATTTCACCGCTACACCAGGAA
TTCCGATCTCCCCTACCACACTCTAGCTAGCCCGTATCGAATGCAGACCCGGGGTTAAGCCCCGGGCTTTCACAT
CCGACGTGACAAGCCGCCTACGAGCTCTTTACGCCCCAATAATTCCGGACAACGCTTGCGCCCTACGTATTACCGC
GGCTGCTGGCACGTAGTTAGCCGGCGTTCTTCTGCAGGTACCGTCACTTTCGCTTCTTCCCTGCTGAAAGAGGT
TTACAACCCGAAGGCCGTCATCCCTCACGCGGCGTCGCTGCATCAGGCTTTCGCCCATTGTGCAATATTCCCCAC
TGCTGCCTCCCGTAGGAGTCTGGGCCGTGTCTCAGTCCCAGTGTGGCGGTCGCCCTCTCAGGCCGGNTANCCGTC
GTCGCCTTGGTANGCCATTANCCCACCAACAAGCTGATANGCCGNGGGCTCATCCTTCANCGCCGGAGCTTTTAA
CCCCGTCCCATGCGGGACAGAGTGTTATCCGGTATTAGATCCCGTNTCCAGGGCTTGTNCATAGTGAAGGGCANA
TTGCCACGTGTTACTCANCCGTTCGC

FIGURE 19

EN4

GGCGGCGTGCTTAACACATGCAAGTCGAACGATGAACCACTTCGGTGGGGATTAGTGGCGAACGGGTGAGTAACA $\tt CTGAGTGGGGGTTAAAAGCTCCGGCGGTGAAGGATGAGCCCGCGGCCTATCAGCTTGTTGGTGAGGTAATGGCTC$ ACCAAGGCGACGACGGCCTGAGAGGGCGACCGGCCACACTGGGACTGAGACACGGCCCAGACTCCTA TTCGGGTTGTAAACCTCTTTCAGCAGGGAAGAAGCGAAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAACTAC $\tt GTGCCAGCAGCCGCGTAATACGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTCGTAGGCGGC$ GGGAGATCGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATTCAGGAGGAACACCGGTGGCGAAGGCGGATCT CTGGGCCATTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCCGT AAACGGTGGGAACTAGGTtGTTGGCGACATTCCACGTCGTCGGTGCCGCAGCTAACGCATTAAGTTCCCCGCCTG GGGAGTACGGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCAGCGGAGCATGTGGCTTAAT TCGACGCAACGCGAAGAACCTTACCAAGGCTTGACATACACCGGAAAGCATCAGAGATGGTGCCCCCCTTGTGGT CGGTGTACAGGTGGTGCATGGCTGTCAGCTCGTGTGGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAAC CCTTGTTCTGTGTTGCAGCATGCCCTTCGGGGTGATGGGGACTCACAGGAGACCGCCGGGGTCAACTCGGAGGAA GGTGGGGACGACGTCAAGTCATCATGCCCCTTATGTCTTGGGCTGCACACGTGCTACAATGGCAGGTACAATGAG CTGCGATACCGTGAGGTGGAGCGAATCTCAAAAAGCCTGTCTCAGTTCGGATTGGGGTCTGCAACTCGACCCcaT GAAGTCGGAGTTGCTAGTAATCGCAGATCAGCATTGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCC CTGGCGATTGGG

EN10

GAGTTTGATCNNGGCTCAGACGAACGCTGGCGGCGTGTTAACACAANCCAAGTCGAANGNTGAACCACTTCGTTG ${\tt GGATTAGTGCGAACGGTGNTAACACGNTGGCAATGTGCCCTTCACTNTGGGACAAGNCCTGGAAACCGGGTTCTA}$ ATACCGGATACCACTACCCGCAGGCATCTGTGGTGTTTGAAAGCTCCGCCGTTGAAGGATGAGCCCGCGGCCTAT CAGCTTGTTGGTGAGGTAATGGCTCACCCAAGGCGACGACGGATAGCCGGCCTGAGAGGGGGACCGGCCACACTG GGACTGAGACACGGCCCAGACTCCTACGGAGGCAGCAGTGGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAG CGACGCCGCGTGAGGGATGACGGCCTTCGGGTTGTAAACCTCTTTCAGCAGGGAAGAAGCGAAAGTGACGGTACC TGCAGAAGAAGCGCCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGCGCAAGCGTTGTCCGGAATTAT TGGGCGTAAAGAGCTCGTAGGCGGCTTGTCACGTCGGGTGTGAAAGCCCGGGGCTTAACCCCGGGTCTGCATTCG ATACGGGCTAGCTAGAGTGTGGTAGGGGAGATCGGAATTCCTGGTGTACCCGGTGAAATGCGCAGATATCAGGAG GAACACCGGTGGCGAAGGCGGATCTCTGGGCCATTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGAT TAGATACCCTGGTAGTCCACGCCGTAAACGGTGGGAACTAGGTGTTGGCGACATTCCACGTCGTCGTGCCGCAG $\tt CTAACGCATTAAGTTCCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCCGCAC$ AAGCAGCGGAGCATGTGGCTTAATTCGACGCAACGCGAAGAACCTTACCAAGGCTTGACATACGCCGGAAAGCAT CAGAGATGGTGCCCCCCTTGTGGTCGGTGTACAGGTGGTGCATGGCTGTCGTCGTGAGATGTTGG GTTAAGTCCCGCAACGAGCGCAAcCCTTGTCCTGTGTTGcCAGCATGCCCTTCGGGGTGATGGGGACTCACAGGA GACCGCCGGGGTCAACTCGGAGGAAGGTGGNGACGACGTCGAGTCATCATGCCCCTTATGTCTTGGGGCTGCACA CGTGCTACNATGggCaGGTACAATGAGCTGCGATACCGTGAGGTGGAGCgCATCTnnnnnAGCctGTCTCAGTTC GgATTGGGGTCTGcAACTCGACCCCaTGAAGTCGGAGTTGCTAgATAATCgCAgATCAGCATTGCtGCGqTGAAT ACGTtCCCGGGCCTTGTACACCCCCCGTCACGTCACGAAAGTCGGTAACACCCGAAGCCGGTGGCCCAACCCC TTGTGGGAGGGAGCTGTCGAANGTGG

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[FIGURE 19 CONTINUED]

EN22

TCCTCAGCGTCAGTAATGGCCCAAAAAACCGCCTTCGCCACCGGTGTTCCTCCTGATATCTGCGCATTTCACCGCT
ACACCAGGAATTCCNATCTCCCCTACCACACTCTAGCTAGCCCGTATCNAATGCAAACCCGGGGTTAANCCCCGG
GCTTTCACATCCNACNTGACAAGCCGCCTACAANCTCTTTACGCCCAATAATTCCGGACAACNCTTGCGCCCTAC
TTATTACCGCGGCTGCTGGCACTTATTTAGCCGGCGCTTCTTCTGCAGGTACCGTCACTTTCCCCTGC
TGAAAAAGGTTTACAACCCNAAGGCCGTCATCCCTCACGCGGCNTCNCTGCATCAGGCTTTCNCCCATTGTGCAA
TATTCCCCACTGCTGCCTCCCGTAGGATTCTGGGCCGTNTCTCANTCCCANTGTGGCCGGTCGCCCTCTCAGGCC
GGCTACCCGTCGTCNCCTTGGTAGGCCATTACCCCNCCAACAANCTGATAGGCCGCGGGCTCNTCCTTCACCGCC
GGAGCTTTCAACCCCGTCCCATGCGGGANAAANTGTTNTCCGGTATTAAAACCCGTTTCCAGGGNTTGTCCAAAA
TTGAAGGGNANATTGCCCACTTTTTNNTCACCCGTTCCCCACTAATCCACCACCAAA

EN30

 $\tt TGGNGGNGTGCTTAACACATGCAAGTCGAACGATGAANCCTTTCGGGGTGGATTAGTGGCGAACGGGTGAGTAAC$ ACGTGGGCAATCTGCCCTTCACTCTGGGACAAGCCCTGGAAACGGGGTCTAATACCGGATAACACTCTGTCCCGC ${\tt ATGGGACGGGGTTAAAAGCTCCGGCGGTGAAGGATGAGCCCGCGGCCTATCAGCTTGTTGGTGGGGTGATGGCCT}$ ACCAAGGCGACGACGGCTAGCCGGCCTGAGAGGGCGACCGGCCACACTGGGACTGAGACACGGCCCAGACTCCTA CGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGAGGGATGACGGCC TTCGGGTTGTAAACCTCTTTCAGCAGGGAAGAAGCGAAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAACTAC GTGCCAGCAGCCGCGGTAATACGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCCGTAAAGAGCTCGTANGCGGC GGAGATCGGAATTCCTGGTGTANCGGTGAAATGCGCAGATATCAAGAGGAACANCGGTGGCGAANGCGGATCTCT GGGCCATTACTGACGCTGAGGAGCGAAAGCGTGGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCCGTAA ACGTTGGGAACTAGGTGTTGGCGACATTCCACGTCGTCGGTGCCGCAGCTAACGCATTAAGTTCCCCGCCTGGGG AGTACGGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCAGCGGAGCATGTGGCTTAATTCG ACGCAACGCGAAGAACCTTACCAAGGCTTGACATATACCGGAAAGCATCAGAGATGGTGCCCCCCTTGTGGTCGG TATACAGGTGGTGCATGGCTCGTCAGCTCGTGTGGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCT TGTTCTGTGTTGCCAGCATGCCCTTCGGGGTGATGGGGGACTCACAGGAGACTGCCGGGGGTCAACTCGGAGGAAGG TGGGGACGACGTCAAGTCATCATGCCCCTTATGTCTTGGGCTGCACACGTGCTACAATGGCCGGTACAATGAGCT GCGATGCCGCGAGGCGGAGCGAATCTCAAAAAGCCGGTCTCAGTTCGGATTGGGGTCTGcAACTCGACCCcATGA ${\tt AGTCGgAGTTGCTAgTAATCgCAgATCAgCATTGCTGCGGTGAATACgTTNCCGGGCCTtGTACAcACCGCCCGT}$ CTGGCGATTGG

EN43

CTCAGCGTCACTATCGGCCCAAAANACCGCCTTCGCCACCGGTGTTCCTCCTGATATCTGCGCATTTCACCGCTA
CACCAGGAAATTCCANTCTCCCCTACCGAACTCTANCCTGCCGTATCAACCGCAGGCTTGGGGTTAAGCCCCAA
TTTTTCACGGTCAACGCNACAAGCCGCCTACAAGCTCTTTACGCCCAATAAATCCGGACAACGCTCGCACCCTAC
TTCTTACCGCGGCTGCTGGCACTTATTTGGCCGGTGCTTCTTCTGCAGGTACCGTCACTCTCGCTTCGTCCTGC
TNAAAAAGGTTTACAACCCGAAGGCCGTCATCCCTCACGCGGCNTCGCTGCATCAGGCTTCCGCCCATTGTGCAA
TATTCCCCACTGCTGCCCCCGTAGGATTCTGGGCCGTNTCTCANTCCCAGTGTGGCCGGTCGCCCTCTCAGGCC
GGCTACCCGTCGTCGCCTTGGTAGGCCATCACCCCACCAACAAGCTGATAGGCCGCNAAGCCCATCCCAAGCCGA
AAAACTTTCCACCACCAGCCATGCGGCCAAAAATTCCTATTCGGTATTAGCCCCCGTTTCCNAAGGTTNTCCCAAA
GCTTGGGGCAGGTTGCTCACTTTTTACTCACCCGTTCCCGCTCAATTACCCCNAAGGGGNTTTCCCTCAACTTGC
AT

28/30

[FIGURE 19 CONTINUED]

EN47

AACACGTGAGTAATCTGCCCCAGGCTCTGGGATAGCCACCGGAAACGGTGATTAATACCGGATACGACAACCGAT TGCATGATCTGGTTGTGGAAAGTTTTTCGGCCTGGGATGTGCTCGCGGCCTATCAGCTTGTTGGTGAGGTAATGG $\tt CTCACCAAGGCTTCGACGGGTAGCCGGCCTGAGAGGGTGACCGGCCACACTGGGACTGAGACACGGCCCAGACTC$ CTACGGGAGGCAGCAGTGGGGAATATTGGACAATGGGCGGAAGCCTGATCCAGCAACGCCGCGTGAGGGATGACG GCCTTCGGGTTGTAAACCTCTTTCAGCACAGACGAAGCGCAAGTGACGGTATGTGCAGAAGAAGGACCGGCCAAC GGTCTGTCGCGTCGGGAGTGAAAACCAGGTGCTTAACACCTGGCCTGCTTTCGATACGGGCAGACTAGAGGTACT ${\tt CCGTAAACgTTGGGCGCTAGgTGTGGGACACATTCCACGTGTTCCGTGCCGCAGCTAACGCATTAAGCGCCCCGC}$ CTGGGGAGŤACGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCGGCGGAGCATGCGGATT AATTCGATGCAACGCGAAGAACCTTACCTGGGTTTGACATACACCGGAAAGCCGTAGAGATACGGCCCCTTTTAG $\tt CCCTCGTCCTATGTTGCCAGCAATTCGGTTGGGGACTCATAGGAGACTGCCGGGGTCAACTCGGAGGAAGGTGGG$ GATGACGTCAAGTCATGCCCCTTATGTCCAGGGCTTCACGCATGCTACAATGGCCGGTACAAAGGGCTGCGA TCCCGTGAGGGTGAGCGAATCCCAAAAAGCCGGTCTCAGTTCGGATTGGGGTCTGCAACTCGACCCCATGAAGTC GGAGTCGCTAGTAATCGCAGATCAGCAACGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACG TG

EN59

GGGNATTAGTGGGGAACGGGTGAGTAAAANGTGGCCANTTTCCCCTGNATTTTGGACANCCCCNGGAAANGGNTT NTAAAACNGGATANTGACCACCTTGGCATCCAAGTTTTNGAAACTTCCGGCGGTGCAGGATGAGCCNGCGGCNTA TNAGCTTGTTGGNGAGGTAATGGNTCACCAAGGGANGACGGGTAGCCGGCCTGAGAGGGGACCNGCCACANTGGG ANTGAGANACGGCCCAGANTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGG ANNCCGCGTGAGGGANGACGGCCTTNGGGTTGTAAACNTTTTTNAGCAGGGAAGAGCGAAAGTGACGGTACCTG CAGAAGAAGCGCCGGCTAAATAAGTGCCAGCAGCCGCGGTAATAAGTAGGGNGCGAGCGTTGTNCGGAATTATTG ${\tt GGNGTAAAGAGTTTGTAGGCGGNTTGTNAAGTNGGTTGTGAAAGCCCGGGGNTTAACCCCGGGTTTGCAGTTGAT}$ ACGGGCAGGNTAGAGTTCGGTAGGGGAGATNGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAA CACCGGTGGCGAAGGCGGATCTCTGGGCCATTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAG ATACCCTGGTAGTCCACGCCGTAAACGGTGGGAACTAGGTGTTGGCGACATTCCACGTCGTCGGTGCCGCAGCTA CAGCGGAGCATGTGGCTTAATTCGACGCAACGCGAAGAACCTTACCAAGGCTTGACATACACCGGAAAGCATCAG CTACAATGGCCGGTACAAAGAGCTGCGATACCGTGAGGTGGAGCGAATCTCAAAAAGCCGGTCTCAGTTCGGATT GGGGTCTGCAACTCGANCCCATGAANTCGGAGTTGCTAATTAATCGCAAAATCAAGCATTGCTGGCGGTGAATAC GTTCCC

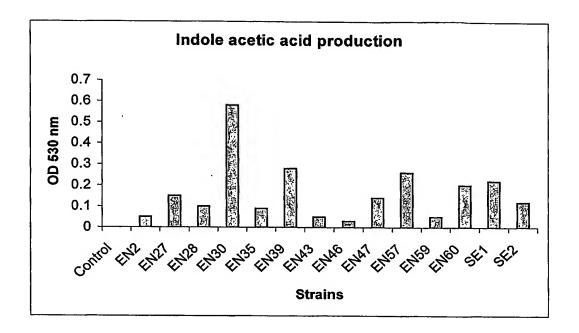
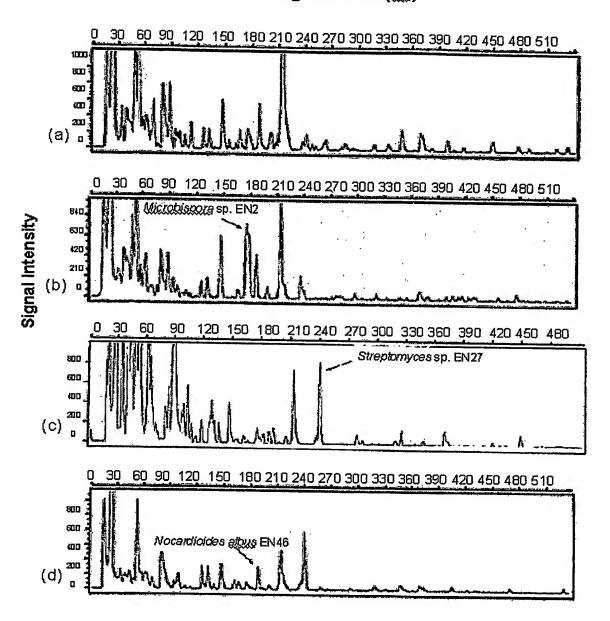


Figure 20

Figure 21





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